

**What is claimed is:**

1. A method for producing a holographic stereogram, comprising the steps of:

(i) computing image information data for producing the holographic stereogram based on a plurality of image data provided by a digital camera;

(ii) recording the image information data on a silver halide photographic material,

(iii) developing the recorded silver halide photographic material at a temperature of between 43 and 180 °C; and

(iv) superimposing the developed silver halide photographic material with a processing member in the presence of an aqueous solvent; and

(v) separating the processing member superimposed on a surface of the developed silver halide photographic material to obtain the holographic stereogram,

wherein the silver halide photographic material comprises a support having thereon:

(a) a hydrophilic colloid layer; and

(b) a silver halide emulsion layer containing silver halide grains having an average particle diameter of 5 to 50 nm.

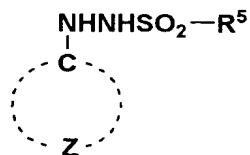
2. The method for producing the holographic stereogram of claim 1,

wherein the hydrophilic colloid layer of the silver halide photographic material further contains an insoluble metal oxide or an insoluble metal hydroxide.

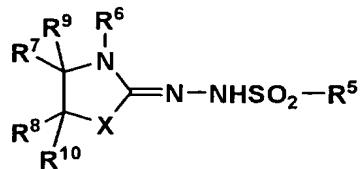
3. The method for producing the holographic stereogram of claim 1,

wherein the silver halide emulsion layer of the silver halide photographic material further contains a compound represented by one of Formulas (1) to (6):

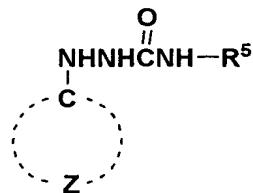
Formula (1)



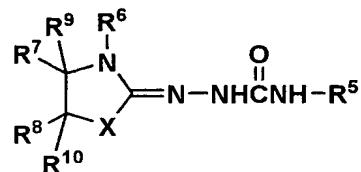
Formula (2)



Formula (3)

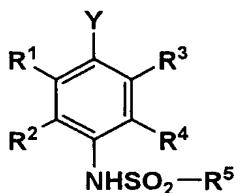


Formula (4)



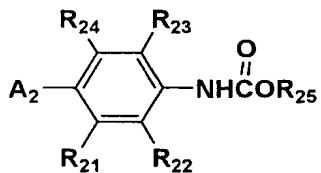
wherein R<sup>5</sup> is a substituted or unsubstituted alkyl, aryl or heterocyclic group; Z indicates a group of atoms forming an aromatic ring, provided that when Z forms a benzene ring with a carbon atom, the benzene ring have one or a plurality of substituents having a sum of Hammett's constant  $\sigma_p$  of the substituents is more than 1; R<sup>6</sup> is a substituted or unsubstituted alkyl group; X is an oxygen atom, a sulfur atom, a selenium atom or a tertiary amino group having an alkyl or aryl group; and R<sup>7</sup> - R<sup>10</sup> each are a hydrogen atom or a substituent, and R<sup>7</sup> - R<sup>10</sup> each may combine with each other to form a double bond or a ring:

Formula (5)



wherein Y is a hydroxyl group or a substituted or unsubstituted amino group;  $R^1 - R^4$  each are a hydrogen atom, a halogen atom, an alkyl group, an aryl group, an alkylcarbonamide group, an arylcarbonamide group, an alkylsulfonamide group, an arylsulfonamide group, an alkoxy group, an aryloxy group, an alkylthio group, an arylthio group, an alkylcarbamoyl group, an arylcarbamoyl group, a carbamoyl group, an alkylsulfamoyl group, an arylsulfamoyl group, a sulfamoyl group, a cyano group, an alkylsulfonyl group, an arylsulfonyl group, an alkoxy carbonyl group, an aryloxycarbonyl group, an alkylcarbonyl group, an arylcarbonyl group, or an acyloxy group; and  $R^5$  is the same as  $R^5$  in Formulas (1) - (4):

Formula (6)



wherein R<sub>21</sub> - R<sub>25</sub> each are a hydrogen atom or a substituent; A<sub>2</sub> is a hydroxyl group or a substituted amino group; R<sub>21</sub> and R<sub>22</sub>, and R<sub>23</sub> and R<sub>24</sub>, may combine with each other to form a ring; and the substituted amino group of A<sub>2</sub> and R<sub>21</sub> or R<sub>24</sub> may combine with each other to form a ring.

4. The method for producing the holographic stereogram of claim 1,

wherein the processing member containing a silver bleaching agent and a silver halide fixing agent; and an amount of the aqueous solvent used in the step (iv) is between 1/10 and 1/100 of a volume required to maximally swell the silver halide emulsion layer and the hydrophilic colloid layer on the support.

5. The method for producing the holographic stereogram of claim 1,

wherein the processing member containing a silver bleaching agent; and an amount of the aqueous solvent used in the step (iv) is between 1/10 and 1/100 of a volume required to maximally swell the silver halide emulsion layer and the hydrophilic colloid layer on the support.

6. The method for producing a holographic stereogram of claim 1,

wherein the processing member containing a silver halide fixing agent; and an amount of the aqueous solvent used in the step (iv) is between 1/10 and 1/100 of a volume required to maximally swell the silver halide emulsion layer and the hydrophilic colloid layer on the support.

7. The method for producing the holographic stereogram of claim 1,

wherein the hydrophilic colloid layer of the silver halide photographic material further contains an insoluble metal oxide or an insoluble metal hydroxide; the processing member contains a physical developing nucleus, a complex forming agent and a silver fixing agent; and an amount of the aqueous solvent used in the step (iv) is between 1/10 and 1/100 of a volume required to maximally swell the silver halide emulsion layer and the hydrophilic colloid layer on the support.

8. The method for producing the holographic stereogram of claim 1, further comprising the step of:

subjecting the exposed silver halide photographic material to an activator processing prior to the step (iii).